

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

1 -13 (Canceled).

14 (Currently Amended). A temperature sensing device for measuring temperature of a sterile medical solution comprising:

a medical solution container containing a sterile medical solution;

a fluid line coupled to said medical solution container to receive said sterile medical solution;

a fitting disposed at a selected location along said fluid line and including:

first and second open ends each securable to selected portions of said fluid line;

a uniform passage disposed within said fitting ~~and extending between said first and second open ends~~ to permit said sterile medical solution flowing within said fluid line to flow through said fitting;

a connection port disposed on an exterior surface of said fitting and including an open proximal end and an open distal end, wherein said distal end is in fluid communication with said passage; and

a thermally conductive receptacle including an open proximal end and a closed distal end to directly contact and conduct thermal energy from said sterile medical solution flowing within said passage, wherein said receptacle is secured within said connection port to form a fluid tight seal to maintain said sterile medical solution within said passage, and said receptacle extends partially within said passage such that the closed distal end of said receptacle is proximate the distal end of said connection port and contacts fluid flowing within said passage; and

a temperature sensor removably received within said receptacle open proximal end to measure temperature of said sterile medical solution flowing through said fitting and to generate an electrical temperature signal indicating said measured solution temperature to facilitate electronic display of said measured solution temperature.

15 (Previously presented). The temperature sensing device of claim 14 further comprising:

a temperature monitor in communication with said temperature sensor to receive said temperature signal and electronically display said solution temperature measured by said temperature sensor.

16 (Original). The temperature sensing device of claim 15, wherein said temperature monitor includes a hand-held display device.

17 (Withdrawn). The temperature sensing device of claim 14, wherein said temperature sensor directly contacts fluid flowing within said passage.

18 (Canceled).

19 (Previously presented). The temperature sensing device of claim 14, wherein said connection port extends from an outer surface of said fitting and said device further comprises:

a securing member to secure said temperature sensor to said connection port, wherein said securing member includes a recess defined therein and said temperature sensor is disposed within said recess and extends to contact said receptacle when said securing member is secured to said connection port.

20 (Original). The temperature sensing device of claim 19, wherein said securing member and said connection port include a locking mechanism to releasably secure said securing member to said connection port and to facilitate contact between said temperature sensor and said receptacle.

21 (Withdrawn). The temperature sensing device of claim 20, wherein said locking mechanism includes:

at least one projection removably attached to an outer surface of said connection port; and
at least one engagement member disposed on said securing member to engage a

corresponding projection;

wherein said at least one engagement member is configured to remove said corresponding projection from said connection port in response to disengagement of said securing member with said connection port to thereby prevent re-engagement of said connection port with said securing member and re-use of said fitting.

22 (Withdrawn). The temperature sensing device of claim 14, wherein said connection port includes a flexible membrane to seal an opening in said connection port from said passage, and said temperature sensor includes a sensing tip configured to penetrate said flexible membrane and directly measure temperature of fluid flowing within said passage.

23 - 50 (Canceled).

51 (Previously presented). A temperature sensing device for measuring temperature of a sterile medical solution comprising:

a medical solution container including a sterile medical solution;

a fluid line coupled to said medical solution container to receive said sterile medical solution;

connector means disposed at a selected location along said fluid line for permitting solution flow therethrough, said connector means including:

first and second open ends each securable to selected portions of said fluid line;

uniform flow means disposed within said connector means ~~and extending between said first and second open ends~~ for permitting said sterile medical solution flowing within said fluid line to flow through said connector means;

fluid access means disposed on an exterior surface of said connector means and including an open proximal end and an open distal end, wherein the open distal end of said fluid access means is in fluid communication with said flow means; and

thermal contact means including an open proximal end and a closed distal end for directly contacting and conducting thermal energy from said sterile medical solution flowing within said flow means, wherein said thermal contact means is secured within said fluid access

means and forms a fluid tight seal to maintain said sterile medical solution within said flow means, and said thermal contact means extends partially within said uniform flow means such that the closed distal end of the thermal contact means is proximate the distal end of said fluid access means and contacts fluid flowing within said uniform flow means; and

temperature sensing means removably received within said open proximal end of said thermal contact means for measuring temperature of said sterile medical solution flowing through said connector means and for generating an electrical temperature signal indicating said measured solution temperature to facilitate electronic display of said measured solution temperature.

52 (Previously presented). The temperature sensing device of claim 51 further comprising:

display means in communication with said temperature sensing means for receiving said temperature signal and electronically displaying said solution temperature measured by said temperature sensing means.

53 (Withdrawn). The temperature sensing device of claim 51, wherein said temperature sensing means directly contacts fluid flowing within said flow means.

54 (Canceled).

55 (Previously presented). The temperature sensing device of claim 51, wherein said fluid access means extends from an outer surface of said connector means and said device further comprises:

securing means for securing said temperature sensing means to said fluid access means, wherein said securing means includes a recess defined therein and said temperature sensing means is disposed within said recess and extends to contact said thermal contact means when said securing means is secured to said fluid access means.

56 (Withdrawn). The temperature sensing device of claim 55, wherein said securing

means and said fluid access means include locking means for releasably securing said securing means to said fluid access means and for facilitating contact between said temperature sensing means and said cover means.

57 (Withdrawn). The temperature sensing device of claim 56, wherein said locking means includes:

projection means removably attached to an outer surface of said fluid access means for securing said securing means to said fluid access means; and

engagement means disposed on said securing means for engaging a corresponding projection means for securing said securing means to said fluid access means;

wherein said engagement means removes said corresponding projection from said fluid access means in response to disengagement of said securing means with said fluid access means to thereby prevent re-engagement of said fluid access means with said securing means and re-use of said connector means.

58 (Withdrawn). The temperature sensing device of claim 51, wherein said fluid access means includes barrier means for sealing an opening in said fluid access means from said flow means, and said temperature sensing means includes penetrating sensing means for penetrating said barrier means and directly measuring temperature of fluid flowing within said flow means.

59 (Previously presented). The temperature sensing device of claim 14 further comprising:

a temperature monitor in communication with said temperature sensor to receive said temperature signal and print said measured solution temperature.

60 (Previously presented). The temperature sensing device of claim 14 further comprising:

a temperature monitor in communication with said temperature sensor to receive said temperature signal and record measured temperatures of said medical solution.

61 (Previously presented). The temperature sensing device of claim 60, wherein said temperature monitor includes a printer to print said recorded measured solution temperatures.

62 (Previously presented). The temperature sensing device of claim 51 further comprising:

temperature printing means in communication with said temperature sensing means for receiving said temperature signal and printing said measured solution temperature.

63 (Previously presented). The temperature sensing device of claim 51 further comprising:

temperature monitoring means in communication with said temperature sensing means for receiving said temperature signal and recording measured temperatures of said medical solution.

64 (Previously presented). The temperature sensing device of claim 63, wherein said temperature monitoring means includes printing means for printing said recorded measured solution temperatures.